NOTES ON THE GENUS ERAGROSTIS (GRAMINEAE) IN THE SOUTHEASTERN UNITED STATES

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In the 20 years since the last major treatment of *Eragrostis* for the United States (Hitchcock, 1950), our knowledge of the genus has grown, largely as a result of the numerous recent floras of many parts of the world. As a consequence, there are a number of taxonomic and nomenclatural changes involving members of the genus which are found in the southeastern United States and which have been overlooked in the more recent floras of the region (Radford, et al., 1968; Long & Lakela, 1971). These are discussed together with results of my own investigations.

In the following only names which are relevant to the discussion or are basionyms for such names are included. More nearly complete synonymy is available in Harvey (1948) and Hitchcock (1950).

Eragrostis N.M. von Wolf, Gen. Pl. Vocab. Char. Def. 23. 1776. TYPE SPECIES: *E. eragrostis* (Linnaeus) von Wolf (= *E. minor* Host).

Eragrostis Host, Icon. Gram. Austr. **4:** 14. 1809. Nom. nud.

Eragrostis P. de Beauvois, Ess. Agrost. 70. 1812. TYPE SPECIES: *E. eragrostis* (Linnaeus) Beauvois (= *E. minor* Host).

Neeragrostis Bush, Trans. Acad. St. Louis **13:** 178. 1903. *Emend.* Nicora, Rev. Argent. Agron. **29:** 3. 1962. TYPE SPECIES: *Neeragrostis weigeltiana* (Reichenbach) Bush [= *E. reptans* (Michaux) Nees].

Diandrochloa de Winter, Bothalia **7:** 387. 1960. TYPE SPECIES: *Diandrochloa namaquensis* (Nees) de Winter (= *E. namaquensis* Nees).

As pointed out by Ross (1966), von Wolf's valid and effective publication of *Eragrostis* antedates that by Palisot de Beauvois. This fact has unfortunate consequences for the name of a common weed, *E. poaeoides* Beauv. ex Roem. et Schult. (see below).

Two segregate genera of *Eragrostis* have been proposed. Bush regarded the creeping habit and unisexual nature of the spikelets of *E. hypnoides* (Lam.) B.S.P. and *E. reptans* (Michx.) Nees sufficient grounds to erect a new genus, *Neeragrostis* Bush. Hitchcock (1926) later pointed out that *E. hypnoides* has uniformly hermaphroditic florets, but that *E. reptans* is truly dioecious. He also returned the two species to *Eragrostis*, a placement with which

Harvey (1948) agreed. Nicora (1962) thoroughly re-examined the matter and concluded that *Neeragrostis* is a valid segregate, but that the hermaphroditic *E. hypnoides* should be excluded, thus reducing the genus to a single species, *N. reptans* (Michx.) Nicora. She based her conclusions on five characters: 1. *Neeragrostis* is dioecious, *Eragrostis* hermaphroditic. 2. The creeping habit of *Neeragrostis* is unusual in *Eragrostis*. 3. The styles in *Neeragrostis* are attached to the ovary at a single point, and are unusually elongate, while they are shorter and attached at two separate points on top of the ovary in *Eragrostis*. 4. The bicellular microhairs in *Neeragrostis* are extremely long, due to the elongation of the basal cell to 70–230μm. 5. The silica bodies in *Neeragrostis* are dumbbell-shaped.

Further examination of these characters in *Eragrostis*, especially in *E. hypnoides*, shows that the differences are really not as clear as they seem at first. Dumbbell-shaped silica bodies are the predominant type in *E. tenella* (L.) Beauv. ex Roem. et Schult., and are one of several types present in *E. capillaris* (L.) Nees and *E. hypnoides*. While the basal cells of the bicellular microhairs in *Neeragrostis* are considerably longer than the 20–30 μm typical of *Eragrostis*, those of *E. hypnoides* are also longer than usual (40–65 μm). Furthermore, the unusual length of these hairs in *Neeragrostis* may well be related to their function as glands, since the hairs in all species of *Eragrostis* with which I am familiar are eglandular. The long, thin styles in *Neeragrostis* allow the stigmas to be exserted near the distal end of the floret, as Nicora points out. This is probably an adaptation to compensate for the extremely condensed pistillate inflorescence in this species, but it is also seen in *E. hypnoides*. The placement of the styles on the ovary in *Neeragrostis* is different from all species of *Eragrostis* that I have examined. However, this condition is approached in *E. hypnoides*, in which the style bases are separated during anthesis but come to lie in contact at maturity because the part of the ovary between the bases does not enlarge with the rest of the ovary, and the bases themselves swell. The growth habitat of *Neeragrostis* and *E. hypnoides* is essentially the same, and, furthermore, a creeping, stoloniferous habit is also found in the apparently unrelated, African *E. barbinodis* Hack. and *E. bergiana* (Kunth) Trin. Thus, the only character in which *Neeragrostis* is clearly distinct from *Eragrostis* is in its sex-

uality. It is approached in all other characters by *E. hypnoides,* which appears to be the evolutionary link between *Neeragrostis reptans* and the rest of the genus *Eragrostis,* to which it properly belongs.

As pointed out by its author, the recent discovery (Pohl, 1977) of *Eragrostis contrerasii* R. W. Pohl further supports this conclusion. This Central American species with a creeping habit occupies an intermediate position between *E. reptans* and *E. hypnoides* in that it is dioecious like the former, but both its pistillate and staminate inflorescences are open like those of *E. hypnoides* and staminate plants of *E. reptans.*

De Winter's segregate *Diandrochloa* (1960), is based on two African species, *Eragrostis namaquensis* Nees and *E. pusilla* Hack. He also recommends the transfer of several other species, among which is *E. glomerata* (Walt.) Dewey, a species of the southeastern United States. This segregate genus is based on the species having membranaceous ligules (vs. ligules of hairs), two (vs. three) stamens per floret, and spikelets which are small and delicate, morphologically very similar to those of *E. ciliaris* (L.) R. Br., except that the paleas lack long cilia on their keels. In addition, they are hydrophilous and have somewhat smaller chromosomes than is usual in *Eragrostis.* Of these, the only character which is truly unique and distinctive is the membranaceous ligule. Only two stamens are found in the florets of many American species, e.g., *E. bahiensis* Schrad., *E. secundiflora* Presl, and *E. elliottii* S. Wats. The similarity in spikelet structure between *Diandrochloa* and *E. ciliaris* et aff. is in their small size and disarticulating rachillas. The latter is a widespread character in *Eragrostis,* and spikelet size is quite variable in the genus. The spikelets of *E. spicata* Vasey and *E. frankii* C. A. Meyer, both of which have ligules composed of hairs, are nearly as small as those of *Diandrochloa.* With respect to other spikelet characters, especially the shape and texture of the lemma and the prominence of its lateral nerves, there is at least as strong a similarity between *E. ciliaris* et aff. and the American *E. spectabilis* (Pursh) Steud. or the African *E. aspera* (Jacq.) Nees as between *E. ciliaris* et aff. and the species included in *Diandrochloa.* Hydrophilly is found in several unrelated species, e.g., *E. refracta* (Muhl.) Scribn., *E. lutescens* Scribn., and *E. frankii,* and the differences in chromosome size need further examination since chromosome size is quite

difficult to measure accurately. I feel that as there is only one unique character which separates the species included in *Diandrochloa* from the rest of *Eragrostis,* recognition at the sectional level is more appropriate.

Eragrostis atrovirens (Desfontaines) Trinius ex Steudel, Nom. Bot., ed. 2. **1:** 562. 1840.

Poa atrovirens Desfontaines, Fl. Atlant. **1:** 73, *tab. 14.* 1789.
Eragrostis chariis (Schultes) A. S. Hitchcock, Lingan Sci. Jour. **7:** 193. 1929 [1931]. Sensu Hitchcock, *ibid.;* Manual. 166. 1935; Manual, ed. 2. 167. 1950 [1951], not Schultes.
Eragrostis nutans (Retzius) Nees ex Steudel, Nom. Bot., ed. 2, **1:** 563. 1840. Sensu Long & Lakela, Flora Trop. Florida. 148. 1971, not Retzius.

In making the new combination, *Eragrostis chariis* (Schult.) Hitchc., Hitchcock misapplied Schultes' *Poa chariis* to this widespread African and Asian species, which has been introduced into the southeastern United States. Bor (1960) corrected the error finding that *Poa chariis* Schult., and therefore *E. chariis,* is a synonym of *E. nutans* (Retz.) Nees ex Steud. Long and Lakela (1971) then applied the name *E. nutans* to our representatives of this species. This application is incorrect, for *E. nutans* clearly differs from our plants in several respects, among which are the smaller spikelets (lemmas 1.25 mm long vs. ca. 2 mm long), paleas which persist after the lemma and caryopsis have fallen (vs. paleas falling with the lemmas and caryopsis), and the contracted (vs. open) panicles of *E. nutans.* The determination of our plants as *E. atrovirens* has been confirmed by N. L. Bor (pers. comm.).

Eragrostis bahiensis Schrader ex Schultes, Mantissa **2:** 318. 1824.

Eragrostis expansa Link, Hort. Berol. **1:** 190. 1827.

Eragrostis bahiensis Schrad. ex Schult. has been introduced into the United States from South America, where it is found from Bolivia and southern Brazil south to central Argentina (Burkart, 1969; Cabrera 1970; Hitchcock, 1927). In South America it has been a source of confusion because of its variable panicle morphology and spikelet color. On the basis of this variation, Hitchcock (1927) recognized two taxa, *E. bahiensis* sensu stricto, and *E. expansa* Link. Both of these are found in the United States, although

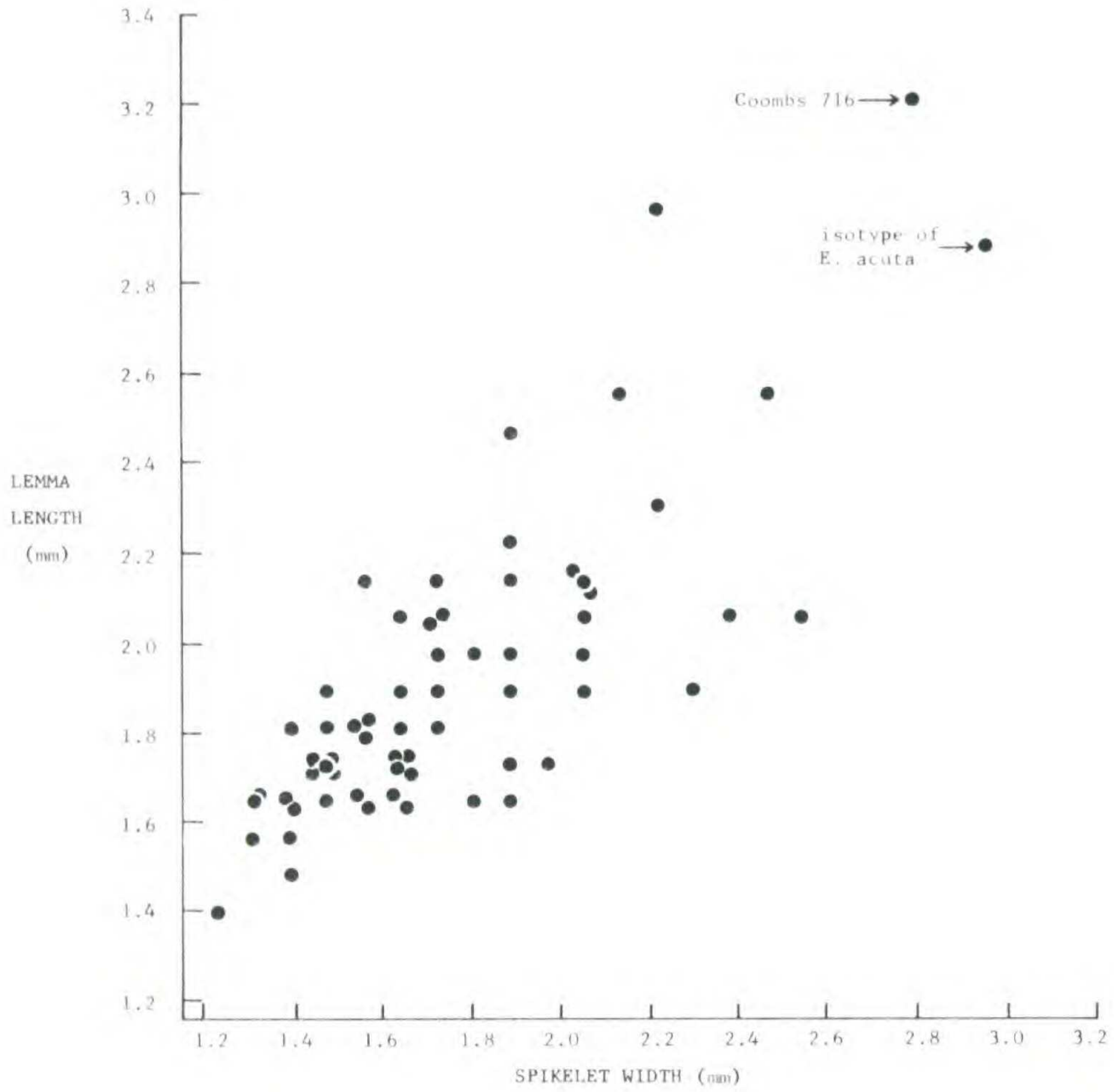

Figure 1. *Eragrostis elliottii.* Scatter diagram showing variation in characters used to separate *E. elliottii* and *E. acuta*. $n = 63$. *Coombs 716* was cited in the original description of *E. acuta*.

the occurrence here of *E. expansa* has not previously been reported.

Burkart (1969) united these under *Eragrostis bahiensis* sensu lato, with the approval of E. Nicora, who has been interested in *Eragrostis* in South America for years, and who assisted in his treatment of the genus. As Hitchcock had done, Rosengurtt et al. (1970) recognized both species, distinguishing them on the basis of the degree of panicle contraction. Examination of the South American material at the U.S. National Herbarium convinced me that this is a highly variable character in *E. bahiensis*, as it is in many other *Eragrostis* species. Consequently, I agree with Burkart that *E. expansa* and *E. bahiensis* sensu stricto, are the same.

Eragrostis cumingii Steudel, Syn. Pl. Glum. **1:** 206. 1854.

Eragrostis simplex Lamson-Scribner, U. S. Dept. Agric. Div. Agrost. Bull. 7 (ed. 3): 250. *fig. 244.* 1900. LECTOTYPE, **Florida:** Istachatta, dooryard, 26 Aug. 1897, *A. H. Curtiss 6073,* (U. S. Nat. Herb. no. 314,483), US! Isotype, US!.

On the basis of Jansen's (1953) study of the closely related *Eragrostis elongata* (Willd.) Jacq., *E. zeylanica* Nees et Meyer, and *E. cumingii* Steud., and the Old World material of these three species at the U. S. National Herbarium, it is clear that our *E. simplex* Scribn., of Florida, southern Georgia, and Alabama, is the same as *E. cumingii,* a species native to Burma, Malaysia, the Philippines, and Australia (Bor, 1960). Although the Old World material is somewhat more variable than ours with respect to plant size and degree of pilosity of the blades and sheaths, both share such important characters as open panicles with rather distant primary branches which spread at right angles to the panicle axis; short-pedicelled spikelets which are usually crowded onto very short secondary panicle branches; more or less flattened spikelets which are 1.5–2 mm wide; lemmas 1.5–2 mm long and identically shaped; paleas with short-ciliate keels which persist after the lemma and caryopsis have fallen; a tendency for the spikelets to break up both from above and below by the lemmas and caryopses falling from below and the rachilla disarticulating from above at maturity, three stamens per floret; identical, dark to pale brown, ovoid caryopses; and an annual life cycle.

The phytogeographical problem presented by the wide disjunction between the Old and New World distributions of this species is probably best explained by assuming that it was introduced into the New World by European man. This hypothesis is supported by (1) the earliest collection I have seen was made rather recently, in 1894; (2) it is a "rather common species, locally very abundant" (Jansen, 1953, p. 271) in Malaysia; (3) its closest relatives occur in the Old World part of its distribution; (4) according to herbarium labels it occurs in typically weedy habitats in the United States; (5) it is an annual and appears to be cleistogamous as suggested by the dehisced anthers that are common inside the florets and the lack of exserted anthers or stigmas on any of the specimens I examined; and (6) there is a precedent among grasses for such wide disjunctions between the United States and distant countries, e.g., the occurrence of the Australian *Eragrostis elongata* (Willd.) Jacq.

in Florida (see Casual Introductions), Gould and Lonard's (1970) report of the African *Eragrostis plana* Nees from Jamestown, South Carolina, and R. Kologiski's discovery of *Dinebra retroflexa* (Vahl) Panzer, an African species, growing in Charlotte, North Carolina (pers. comm.).

Eragrostis elliottii S. Watson, Proc. Am. Acad. Arts & Sci. **25:** 140. 1890. Based on *Poa nitida* Elliott.

Poa nitida Elliott, Botany of S.C. and Ga. **1:** 162. 1816. Not Lamarck, 1791, nor *Eragrostis nitida* Link, 1827. HOLOTYPE, **South Carolina:** Charleston, Paris Island, *Elliott s. n.*, CHARL.

Eragrostis acuta A. S. Hitchcock, Proc. Biol. Soc. Wash. **41:** 159. 1928. HOLOTYPE, **Florida:** Punta Rassa, Jul. 1900, *Hitchcock 263,* (U.S. Nat. Herb. no. 7,311,236), US!. Isotype, (U.S. Nat. Herb. no. 1,503,824), US!.

As noted in the original description of *Eragrostis acuta* Hitchc., this rare species from western Florida strongly resembles the more widely distributed *E. elliottii* S. Wats., the only differences being that *E. acuta* has longer lemmas and wider spikelets. Harvey (1948) reduced *E. acuta* to synonymy under *E. elliottii,* but it was treated as a distinct species in both editions of Hitchcock's *Manual* (1935 & 1950).

Examination of type material failed to turn up any additional differences except that both the isotype and *Coombs 716* (US), cited in the original publication, were nearly sterile, and, on many spikelets, one to several of the lower lemmas was unusually elongate. Measurements of spikelet width and lemma length on the 63 specimens of *E. acuta* and *E. elliottii* (including 7 from western Florida) at DUKE and NCU demonstrated that the isotype and *Coombs 716* are merely extremes in a pattern of variation which is typical for a single species (Figure 1).

The geographic distribution of plants referable to *Eragrostis acuta* also conforms to the pattern expected for extreme individuals within a normal pattern of variation. There are only about a dozen, widely scattered collections of *E. acuta,* and they are all found within the distribution of *E. elliottii.* Nor are these extreme individuals restricted to western Florida. I have seen collections referable to *E. acuta* from Dade, Leon, Madison, Monroe, and Palm Beach counties in Florida, as well as locations in Alabama.

The high degree of sterility and atypical elongation of some of

the lemmas suggest that possibly the spikelets were infected with a fungus, some of which are known to induce enlargement of the infected parts. There were, however, no externally visible signs of such an infection. In any case, it seems clear to me that *Eragrostis acuta* should be reduced to synonymy under *E. elliottii.*

Eragrostis minor Host, Icon. Descr. Gram. Aust. **4:** 15. 1809. Based on *Poa eragrostis* Linnaeus.

Poa eragrostis Linnaeus, Sp. Pl. **1:** 68. 1753. HOLOTYPE, *Habitat in Italia supra muros. D. Baecker s. n.,* LINN. Microfiche!

Eragrostis eragrostis Beauvois, Ess. Agrost. 71, 174; *pl. 14, fig. 11.* 1812. Based on *Poa eragrostis* Linnaeus.

Eragrostis poaeoides Beauvois ex Roemer et Schultes, Syst. Veg. **2:** 574. 1817. Based on *Poa eragrostis* Linnaeus.

Unfortunately, as a result of the change of date of valid publication of the genus, the name of this worldwide weed must be changed from *Eragrostis poaeoides* Beauv. ex. Roem. et Schult. to *E. minor* Host. Although Host validly and effectively published *E. minor* in 1809, his name has been rejected until now because, prior to Ross' paper in 1966, *Eragrostis* was not considered to be validly published until 1812.

Eragrostis secundiflora Presl ssp. **oxylepis** (Torrey) S. D. Koch, comb. nov. Based on *Poa oxylepis* Torrey.

Poa interrupta Nuttall, Trans. Amer. Phil. Soc., n. s., **5:** 296. 1837. Not Lamarck, 1791. HOLOTYPE, **Arkansas:** In bushy prairies near the sandy banks of the Arkansas River, *Nuttall s. n.,* PH!

Poa oxylepis Torrey in Marcy, Expl. Red. River. 301, *pl. 19.* 1853. Based on *Poa interrupta* Nuttall.

Eragrostis oxylepis (Torrey) Torrey, U.S. Expl. Miss. Pacif. Rept. **4:** 156. 1857.

Eragrostis beyrichii J. G. Smith, Rept. Mo. Bot. Gard. **6:** 117. *pl. 56.* 1895. Type specimen apparently lost; see Harvey (1948).

Eragrostis secundiflora Presl, Reliq. Haenk. **1:** 276. 1830. HOLOTYPE, **Mexico,** *Haenke s. n.,* PR. Photograph and fragment at US! Sensu Small, Manual. 124. 1938; Hitchcock, Manual. 144. 1935, not Presl.

Eragrostis oxylepis var, *beyrichii* (J. G. Smith) Shinners, Field & Lab. **20:** 34. 1952.

The work of Koch and Currie (1973) has shown that although extreme specimens of *Eragrostis oxylepis* (Torr.) Torr. and *E. beyrichii* J. G. Smith can be distinguished, there is continuous variation

between the two in all characters. Therefore, all taxonomic distinctions between the two are abandoned, as was done by Correll and Johnston (1970) and Harvey (1975).

There is little doubt that *Eragrostis oxylepis,* from the southeastern United States, and the Mexican *E. secundiflora* Presl are part of the same species, as was indicated by Harvey (1975). Furthermore, the Brazilian *E. compacta* Steud. is also part of *E. secundiflora,* as suggested by Pilger (1939) and Harvey (1948), who actually reduced *E. compacta* to synonymy under *E. secundiflora.* All three elements in this species share the important characters of a perennial life cycle; a robust habit; spikelets which are generally densely clustered on elongate to very short, usually somewhat distant panicle branches, and which are strongly laterally flattened; reddish, leathery, strongly keeled and prominently nerved lemmas; disarticulating rachillas; and two stamens with very small anthers in each floret.

Within this species, however, there are two distinct elements separated by rather minor morphological differences and a major geographical disjunction. One of these, subspecies *oxylepis* (Torr.) S. D. Koch, is relatively common, being found primarily in Texas, but with significant extensions along the Gulf Coast east to Florida, and south to the city of Veracruz, Mexico. Subspecies *secundiflora* (= *E. compacta*), also appears to be relatively common, but it occurs in eastern Brazil, east of the states of Maranhão, Goias, and São Paulo. In northern South America, Central America, and the West Indies, both subspecies are absent. Surprisingly, subspecies *secundiflora* is known from two localities in southern Mexico, Acapulco, Guerrero (*Haenke, s. n.,* US), and Pochutla, Oaxaca (*Liebmann 12864,* US).

The subspecies differ morphologically in two respects: 1. In subspecies *oxylepis,* the plants have glabrous sheaths and blades, except for a tuft of hairs flanking the base of the blade at the top of the sheath; in some specimens the adaxial side of the base of the blade is densely hirsute, the hairs occasionally arising from papillae. In subspecies *secundiflora,* the sheaths and both sides of the blades are typically densely invested with long, pustulate-based hairs; in a few specimens these hairs are restricted to the upper third of the sheath and lower third of the blade. 2. In subspecies *oxylepis,* the caryopses are elongate-ovoid, 0.7–1.2 mm long and

0.4–0.6 mm wide, the length : width ratio being about 2. In subspecies *secundiflora,* the caryopses are ovoid, 0.6–0.7 mm long and 0.4 mm wide, the length : width ratio being about 1.5. The southern Mexican specimens have caryopses like those of subspecies *secundiflora,* but are intermediate with respect to hairs — the adaxial sides of the blades are pilose, the abaxial sides glabrous, and the sheaths have fringe of long hairs along the upper third of their margins.

Because of this classical pattern of correlated morphological and geographical discontinuity, I feel that the two components of *Eragrostis secundiflora* should be recognized as separate subspecies. It seems likely that there was once a connection between the two, and that the very rare southern Mexican collections are representatives of relict populations.

The type collection, which consists of two sheets, is from one of these relict populations in Mexico. According to L. H. Harvey (pers. comm.), who has seen the holotype, the hairs of the sheaths and blades vary from the intermediate condition typical of plants from this area to the nearly glabrous condition seen in subspecies *oxylepis.* However, as the caryopses of the holotype and the panicle fragment at the U.S. National Herbarium are typical of subspecies *secundiflora,* I am assigning the holotype to the Brazilian subspecies.

Eragrostis tenella (Linnaeus) Beauvois ex Roemer et Schultes, Syst. Veg. **2:** 576. 1817.

Poa tenella Linnaeus, Sp. Pl. **1:** 69. 1753. HOLOTYPE, **India.** Annotated "14 tenella" by Linnaeus. LINN. Microfiche!

Poa amabilis Linnaeus, Sp. Pl. **1:** 68. 1753. LECTOTYPE, *Plukenet,* Alm. bot., *tab. 300, fig. 2!* 1696.

Eragrostis amabilis (Linnaeus) Wight et Arnott ex Nees in Hooker et Arnott, Bot. Beechey Voyage. 251. 1838.

Basing his conclusions on the unpublished research of Otto Stapf, Bor (1960 and pers. comm.) pointed out that *Eragrostis amabilis* (L.) Wight et Arn. ex Nees is the same species as *E. tenella* (L.) Beauv. ex Roem. et Schult. Since Hooker (1896, p. 315) was the first to unite the two, and he used the latter name, *E. tenella* is the correct name for this species (Art. 57, Internatl. Code Bot. Nom., 1972).

Eragrostis tracyi Hitchcock, Amer. Jour. Bot. **21:** 130, *fig. 1.* 1934. HOLOTYPE, **Florida:** Lee Co., Sanibel Island, 19 May, 1901, *S. M. Tracy 1768.* (U.S. National Herbarium no. 441,983). US!

Koch (1972) showed that this "apparently perennial" (Hitchcock, 1950) Florida endemic is really an annual. Although closely related to *Eragrostis tephrosanthos* Schult., a widespread, annual species of the southwestern United States, Mexico, Central America, the West Indies, and the Gulf Coast of the United States, it is easily distinguished from the latter by its anthers.

CASUAL INTRODUCTIONS

The small caryopses, tendency toward weediness, and self-fertility or even cleistogamy of many species of *Eragrostis* make casual introductions of members of the genus outside their natural distributions very likely. It comes as no surprise, then, that there are a number of species native to distant areas which have been collected once, twice, or even thrice in the Southeast.

While admitting the highly subjective nature of such decisions, I have indicated with an asterisk those species which I feel are likely to be introduced repeatedly and should be considered part of the flora.

Eragrostis barrelieri Daveau. This is a Mediterranean species which has become naturalized in Mexico, the West Indies, and the southwestern United States, east to Texas and Kansas (Hitchcock, 1950). In the southeast, it has been collected once on manganese ore piles in Baltimore, Maryland (*C. F. Reed 43644,* US).

***Eragrostis domingensis** (Pers.) Steud. This West Indian and Central American species has been reported from Plantation Key, Monroe Co., Florida by Lakela (1969). It was also collected on 20 June 1935 "near border of Georgia" (*W. A. Silveus 2279,* US).

Eragrostis elongata (Willd.) Jacq. A single specimen of this species, previously unreported from the United States, was found in the U.S. National Herbarium (Florida: Collected in 1897, *Simpson s. n.*, [Herb. Chas. H. Mohr], US). It was misidentified as *E. simplex* Scribn. (= *E. cumingii* Steud.), but is clearly distinct from the latter in that it has two (vs. three) anthers per floret; spikelets which

break up only from above, the lemmas and paleas persisting and the rachillas disarticulating at maturity (vs. spikelets which break up from both above and below, the lemmas falling away below and the rachillas disarticulating above at maturity); paleas with scabrous (vs. short-ciliate) keels; very short panicle branches with dense, sessile clusters of spikelets (vs. more elongate branches with more distant spikelets); and a perennial (vs. annual) life cycle. Simpson's specimen fits Jansen's (1953) description of *E. elongata,* a common Australian species, and also matches perfectly the Australian material of this species in the U.S. National Herbarium.

Eragrostis gangetica (Roxb.) Steud. has been collected near Biloxi, Mississippi (Harvey, 1948; Hitchcock, 1950), and near Lake Trafford, Collier Co., Florida (*Koch 7127,* NSC). This annual Indian species has been known as *E. stenophylla* Hochst. ex Miq., but, as Bor (1960) pointed out, *E. gangetica* has priority.

Eragrostis mexicana (Hornem.) Link is a weedy species native to Mexico and the southwestern United States. It was reported from Delaware by Fernald (1950), but not by Hitchcock (1950) or Harvey (1948).

***Eragrostis neomexicana** Vasey may be only a more robust form of *E. mexicana,* as is the opinion of Gleason and Cronquist (1963). It too is native to the southwestern United States and Mexico, but has been found in Delaware and Maryland (Fernald, 1950; Harvey, 1948; Hitchcock, 1950).

Eragrostis plana Nees. Gould and Lonard (1971) reported that this tropical African species has been collected twice at the Santee Wool Combing Mill at Jamestown, South Carolina.

Eragrostis scaligera Salz. ex Steud., a species native to northeastern Brazil was found growing in a vacant lot at Naples, Collier Co., Florida (Koch, 1975).

Eragrostis virescens Presl. This Chilean species, which is morphologically nearly identical to *E. orcuttiana* Vasey of California, has been collected in Maryland (Harvey, 1948; Hitchcock, 1950) and Appalachicola, Florida (*Chapman s. n.,* US).

SUMMARY

A review of the taxonomy and nomenclature of a number of *Eragrostis* species which occur in the southeastern United States establishes the following: 1. The author of the genus is N. M. von Wolf, not P. de Beauvois. 2. Neither *Neeragrostis* nor *Diandrochloa* should be recognized as valid segregates. 3. The name *E. atrovirens* must replace *E. chariis* and *E. nutans,* as applied in the United States. 4. *Eragrostis expansa,* a segregate of *E. bahiensis* which occurs in the United States, should not be recognized as valid. 5. *Eragrostis cumingii,* an Asiatic species, is conspecific with and has priority over *E. simplex.* 6. *Eragrostis acuta* should be considered a synonym of *E. elliottii.* 7. The name *E. minor* must replace *E. poaeoides.* 8. *Eragrostis oxylepis* should be reduced to subspecific status under *E. secundiflora.* 9. The name *E. tenella* must replace *E. amabilis.* 10. It is pointed out that *E. tracyi* is an annual, closely related to, but distinct from *E. tephrosanthos.* A list of introduced species which have had only limited success is included, with a brief discussion of each.

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